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AUTHOR Wong, Evelyn C.
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ABSTRACT

A master plan is proposed for developmental education at Los Angeles Trade-Technical College. Introductory material discusses basic questions related to developmental education in the areas of access and mission, program and resources, and guidance and placement. This section also establishes the goal of the college's developmental education program as providing students with the basic skills necessary in a technologically advancing society. The next sections present the mission statement of the college and explain its administrative organization. The next section states the specific goals of the developmental education program and describes its major components: (1) counseling; i.e., mandatory assessment, counseling and guidance, and information dissemination on available services; (2) instructional components; i.e., remedial and basic skills instruction, developmental education courses, mediated instruction, and tutorial assistance; (3) curriculum and professional development; and (4) program evaluation. The final sections discuss the staffing needs of the proposed program and present a budget for staff and equipment. Appendices include a report on the operations of the college's Learning Resources Center and a plan for its use in basic skills delivery, space and equipment plans, a job description for the developmental education program director, and an article on streamlining the process of evaluating learning assistance. (HB,

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LOS ANGELES
TRADE-TECHNICAL COLLEGE
400 West Washington Blvd.
Los Angeles, California 90015

A Master Plan For Developmental Education: A Proposal

JC 840 495

OFFICE OF INSTRUCTION REPORT NO. 82-06

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A MASTER PLAN FOR DEVELOPMENTAL EDUCATION: A PROPOSAL

PREPARED BY
EVELYN C. WONG
ASSISTANT DEAN OF INSTRUCTION

LOS ANGELES TRADE-TECHNICAL COLLEGE
OFFICE OF INSTRUCTION REPORT NO. 82-06
NOVEMBER, 1982

ACKNOWLEDGMENT

In February of 1982, Mrs. Evelyn Wong joined the Los Angeles Trade-Technical College's administrative team as an Assistant Dean of Instruction. Mrs. Wong immediately and enthusiastically accepted the responsibility of reviewing the college's efforts in the area of developmental education. Mrs. Wong reviewed committee work, program content, program management and coordination, program facility requirements and current trends in the area of developmental education. The result of Mrs. Wong's extensive review is contained in this document.

This Master Plan contains sound recommendations for the development of LATTC's developmental education program. These recommendations resulted not only from Mrs. Wong's thorough and thoughtful investigation but also from the faculty of the Language Arts, Learning Resources and Mathematics departments. The cooperative effort displayed by the members of these departments is reflected by the comprehensive program outlined in this report.

A very special thanks to Ms. Gloria Marie Jiminez for typing the final copy. The printing was completed by LATTC's graphics service. Ms. Jerri Potras and Mr. Javier Mondragon of this department provided fast and efficient service.

Finally our appreciation is extended to Ms. Lee Hancock, Chairperson of the Language Arts Department, Mr. Lucien Carter, Chairperson of the

Math-Science Department and Mr. Harold Eckes, Coordinator of our Learning Resources Center for their sound advice, their cooperative efforts and their willingness to share their accumulated knowledge with the Basic Skills Committee and Mrs. Wong.

Thomas G. Lakin
Dean of Instruction
November, 1982

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INTRODUCTION

Conversation with educational administrators and with faculty and reviews of current educational literature and research all highlight the continuing attention to and concern about the academic preparedness, or unpreparedness, of today's college student. There appears to be wide agreement that he/she is not prepared for postsecondary study. Our own experience and studies at Los Angeles Trade-Technical College confirm this fact. A 1979 VEA study showed many students testing at grades 4 and 5 in reading and math. A pilot assessment program conducted during the Fall of 1981 found approximately 66 percent of Fall 1981 entering students testing at or below the 9th grade reading level and approximately 94.7 percent scoring at or below the 10th centile in math.

The focus of concern is not on the why of the present problem. Rather our concern is this: If we accept the responsibility for the effective, efficient education of these underprepared students (which is the assumption when we allow enrollment), then how best may we remedy our students' academic deficiencies so that effective learning may occur in our courses and programs? Moreover, in addition to preparing students for jobs, are there other proficiencies required so that our students will always be qualified for a job, given the nature of the changing market?

The answers are not simple; even the experts disagree; research

does not provide the solution. Basic questions appear to center around the following:

1. access and mission: should the community colleges accept all students who apply, regardless of their level of preparedness for postsecondary instruction; does the mission of the community college include compensatory, remedial, basic skills instruction; and, if so, to what level?
2. program and resources: if an appropriate role for the community colleges is remediation, then what form should the program of study take and to what extent should the college commit resources?
3. guidance and placement: should there be assessment; should assessment be mandatory or voluntary; should placement be mandatory or should students be provided with assessment results, receive guidance but be allowed to make their own decisions about placement?

In an effort to deal with some of these basic questions, at the first meeting in Fall 1981, Dr. Thomas G. Lakin, Dean of Instruction, set the tone for study and planning activities which have occurred during this past academic year and which are culminating in this document. He said at that time:

> Our first area of emphasis will be that of Basic Skills Program Development. Our mandatory testing results are verifying something that many of us have known for some time--that we are facing a dilemma--and I might add a dilemma that we should not be ashamed of. We are receiving in our classes an inordinate number of semi-illiterate students who desire to enter programs with increasing demands for literacy. This is our dilemma--how do we take our students as they come to us--unprepared for their chosen vocational or technical program and advance them through our programs which are becoming more and more demanding as the structure of industry

changes and as the so-called areas of "high technology" become larger employers of the work force. Let us not be ashamed of how our students come to us but we must be ashamed if we do not develop programs to take our students as they come to us and provide what they need to be capable of completing what we have to offer. We must not be another revolving door community college with an open-door catalog statement and a get-the-unprepared-ones-out-as-fast-as-you-can institutional modus operandi.

Our effort this year will be to strengthen our basic skills program, to coordinate all of the separate activities related to basic skills and to begin a documentation of how well we accomplish the objective of providing our students with those basic skills that are so necessary in a technologically advancing society.

As a consequence, a college-wide committee on basic skills was formed, subcommittees conducted studies and made recommendations. Our thanks go to the more than 20 Los Angeles Trade-Technical College staff members who participated and provided input for this report. (See Appendix, Subcommittee Reports, 2-23-82 and 3-2-82)

To some extent, the College has attempted to resolve some of the basic questions, but it has not done so in a planned, articulated, and coordinated manner. It appears appropriate at this stage to set objectives, review what we are doing in light of these objectives, develop a plan (including evaluation design) to better meet the objectives, and, to the extent possible, implement the plan.

Finally, before proceeding, the terms basic skills, remedial skills, and developmental skills need to be delineated in terms of their use within the context of this document. Very often the terms are used interchangeably and the definitions by experts in the field vary greatly. Many faculty relate the term basic skills to the disciplines reading, writing, and mathematics and, as a consequence, view the teaching of basic skills as unrelated to their own classroom teaching responsibilites.

The term remedial, on the other hand, connotes a group of students who are so underprepared that they are not ready for college and require extraordinary preparation for college-level work. Finally, developmental, as used here, includes those programs and courses designed to assist poorly or underprepared students in developing the academic skills necessary to achieve success in their community college goals. While remedial or basic skills relates more to specific deficiency classes, the term developmental is broader and emcompasses a more comprehensive, integrated, and unified program of instruction and support services. This point is extremely important: the successful assisting of the underprepared student needs to be a college effort--it is not limited to a few faculty, in specific courses, at particular times. What we are proposing is a program of student developmental activities which include cognitive, social, and emotional components and is integrated into all disciplines.

Lastly, the terms instructional support and learning assistance shall be used interchangeably.

MISSION STATEMENT

The College Mission Statement states: "Within the Los Angeles Community College District, Los Angeles Trade-Technical College is a specialized institution, offering collegiate-level instruction leading to a Certificate, Associate Degree, or transfer to a four-year institution, in a variety of in-depth career programs in the trade, technical, and business areas. General education is offered to meet the requirements for obtaining the Associate Degree, as well as to provide, to an appropriate extent, the needs of students desiring an Associate Degree in general studies." The college goals are to:

1. serve the needs of each student by offering educational experiences which:
   a. assist students to function effectively in the social and occupational environment.
   b. allow each to maintain an entry-level position, to upgrade skills for job advancement or to retrain for a new career.
   c. provide general education, life enrichment, and transfer opportunities to four-year colleges and universities.
2. sponsor community service programs to help meet the cultural, social, recreational, health, and citizenship needs of youths, adults, and senior citizens.
3. maintain an instructional climate and management system in which college personnel communicate effectively, participate in decision making cooperatively and are provided with opportunities for staff development.
4. effectively allocate and utilize resources in order to sustain an environment conducive to the well being of students and staff and to afford the instructional equipment, facilities, and supplies essential to quality programs in vocational and general education.

5. provide counseling and guidance services to potential, present and past students which will promote the concept of vocational and general education, recruit individuals to enroll in programs, assist students to make appropriate career selections, guide their needs in terms of human dignity and self-worth.

6. maintain evaluation procedures which monitor and improve all aspects of educational programs and institutional programs.

As the review of mission, goals, and objectives of the College shows, Los Angeles Trade-Technical College is committed to not only providing access to educational courses and programs but also to providing necessary avenues for academic success. We believe that equal educational opportunity implies more than a guarantee of equal access. We believe that we have a responsibility when we accept students to remove barriers in the cognitive and affective domains which prevent their achieving their educational goals. We believe that our responsibility includes taking aggressive, positive action to develop those student skills, abilities, and knowledge which will enable him/her to succeed. Consequently, we are committed to a program of mandatory assessment, appropriate counseling and guidance, availability of a full complement of instructional support services, a system by which the institution may improve campus-wide response tc non-traditional learners, and sufficient resources to fund the program--all these segments together comprise our proposed master plan for developmental education at Los Angeles Trade-Technical College.

ADMINISTRATIVE ORGANIZATION

Given the integrated, comprehensive nature of the developmental education program, its administrative structure and organization is of utmost importance if the goals and objectives as outlined are to be achieved.

It is recommended that at this time there be no developmental education department. This recommendation is based on the following:

1. the past experience with the CBS program which encountered problems as a result of its "separateness"
2. the scope of the program which crosses several disciplines, college administrative organizational structures, and student service areas
3. the extent and nature of the program clientele (the majority of all enrolled students in every occupational and academic discipline)
4. the diversity of staff required for a comprehensive program
5. the premise that the program will be constantly evolving to better meet needs of changing LATTC curricula and that a department might be less able to respond quickly to change
6. the assertion that a broad program such as envisioned here requires commitment, resources, support and staff from the entire college community.

Facilities

It is recommended that the program be physically situated in the Learning Resources Center because:

1. the Center is in a central location
2. the Center already receives student/staff recognition as a major learning assistance support resource

3. the Center was constructed with the provision for and capability to accommodate new, changed, or expanded functions

4. the Center already houses a number of the proposed program components

5. the Center staff has demonstrated its willingness to cooperate with and its success in working with the cross disciplines and the several administrative organizational structures

A consultant was hired to make recommendations relating to the LRC absorbing these additional functions. The report (see Appendix) contains recommendations for interim accommodations and a second set of recommendations which require A & I work. It is recommended at this time that the interim report (to the extent possible) be adopted, that a Developmental Education Advisory Committee be formulated, and that the committee review the recommendations of both the consultant and the subcommittee report distributed March 2, 1982. The Developmental Education Advisory Committee shall submit recommendations to the Dean of Instruction as to the desired A & I work and the desired configuration of the Developmental Education program activities in the LRC. There is agreement that present floor space in the LRC is 100% utilized and that A & I work to expand floor space is required to adequately house the activities and services as recommended in this document.

Administration

It is recommended that a full-time program director be selected to provide the leadership for planning, developing, implementing and coordinating the array of activities within the developmental education program (see position description, Appendix). The Director, however, shall work with a Developmental Education Advisory Committee and be guided by its input. The Advisory Committee shall be composed of at least one representative from Language Arts, the LRC, Counseling, VEA, EOPS, and

several representatives from content specific disciplines. In effect the director shall be an advocate, an ombudsman, a catalyst, and a broker. Further, because the program will in fact comprise a subdivision of the total learning assistance support services function housed within the Center, it is recommended that the director have line responsibility to the administrative management of the Learning Resources Center (see organization chart, Appendix). Finally, because the coordination activities and instructional support areas may overlap, it is recommended that the Learning Resources Center administrator review the position descriptions of the Developmental Education program director, the Media Services director, and the Instructional Resources Laboratory director so that duties and areas of responsibilities are appropriately and clearly delineated.

The first Director shall be selected by a committee comprised of the Dean of Instruction, or his designee, a representative from the Language Arts faculty, a representative from the math faculty, a representative from the Learning Resources Center, and a representative from a vocational program that has previously been involved with basic skills or tutoring. This first director shall serve a term of two years. Thereafter, the Developmental Education Advisory Committee shall select the director for two-year terms. It is further recommended that the director be assigned as a temporary consulting instructor or equivalent in recognition of the quasi administrative duties and responsibilities.

PROGRAM CONTENT

The recognized need for special services for low academic achievers is not recent. Remedial education with an emphasis on developing proper study skills and habits was part of the course offerings at Wellesley College as early as 1894. K. Patricia Cross, in her 1971 publication Beyond the Open Door, identified the following five perceived causes of low academic achievement: (1) poor study habits, (2) low academic ability, (3) low I.Q., (4) psychological motivational blocks to learning, and (5) socio-cultural factors related to deprived family and social backgrounds. From a historical point of view, each new explanation has essentially been added on to the existing list of causes, moving from a simple to increasingly complex explanation of low achievement.

Current LATTC developmental skills offerings appear to recognize and to make provision for remedying these perceived causes. The efforts to date have been effective. What appears to be absent, however, are coordination, to prevent overlap and inefficient resource utilization; clearly articulated and publicized objectives and activities, to provide campus-wide communication and effective utilization; a comprehensive service for all learners requiring assistance; and a systematic approach to further development, improvement, and evaluation of a campus-wide developmental education program.

What we are recommending is a unified system whereby all existing and future resources are brought together, exploited, and organized to

provide:

1. assistance to students to help them build their personal learning skills
2. assistance to students to help them prepare for academic and occupational courses
3. assistance to students to support them in their academic and occupational courses
4. assistance on campus to improve the institutional response to non-traditional learners

We are advocating a program which includes both in- and out-of-classroom activities and which pervades all disciplines (the unified theme is an extension of the approach conceptualized in the writings of Frank Christ and Gwyn Enright).

It is recommended that the developmental education program include the following components:

1. counseling
   a. mandatory assessment with voluntary placement guidelines
   b. counseling and guidance as a followup to the assessment
   c. a formal communication system disseminating information on services available
2. instructional
   a. remedial and basic skills instruction
   b. developmental education courses designed to augment instruction (particularly in the occupational disciplines)
   c. mediated instruction
   d. tutorial assistance activities
3. curriculum and professional development
   a. a support system for faculty who feel that their courses and teaching would be enhanced by knowledge of student learning styles and by inclusion of developmental education content

b. active coordination with the activities of the Teaching Resource Center and the Instructional Media Center

4. evaluation

Counseling Components

Counseling and guidance is an important area of focus if the developmental education program is to have a campus-wide impact. The present dedicated efforts of a few individuals and disciplines reach only a few students. Their activities are not touching sufficient students at an appropriately early point in their academic careers. Los Angeles Trade-Technical College cannot yet claim success in eliminating the revolving door yet all staff are committed to improving retention. The literature tells us that early identification of the high-risk students and appropriate counseling and guidance into available instructional support services enhance academic success, therefore, the importance of the consideration and inclusion of this area in our master plan.

The first recommendation is that an orientation activity similar to Psychology 9 be required for students enrolled in 12 units or more. It is believed that adequate interpretation of assessment scores and appropriate counseling and guidance activities cannot occur given the present staff. A mandatory orientation activity provides for early identification of and early assistance to the high-risk student, a further manifestation of our commitment to access and excellence.

It is recommended that a counselor--assisted by an advisory committee including counselors, basic skills instructors, academic and occupational instructors, and appropriate learning assistance support personnel--be assigned the responsibility for directing and coordinating

these activities:

1. implementing a mandatory assessment program
2. reviewing assessment instruments, rating procedures, and placement recommendation
3. integrating the assessment and guidance activities into the registration/enrollment process
4. collecting and disseminating information on course entry-level requirements and textbook reading level
5. providing college staff with information needed to advise students on available learning assistance support services
6. assisting in developing a referral system for utilization by college staff (especially faculty) with special emphasis on those counseling and guidance activities conducted under the aegis of categorical funds

The developmental education program director shall serve as liaison between/among the counseling steering committee and the other affected functional campus units by insuring open communication, by garnering resources from among the various administrative units, and by coordinating the activities in this area with the other three.

We have described not merely a process for identifying and placing students in basic skills or remedial classes but a college commitment to advise the underprepared students of their many options which include

1. enrolling in only those classes in which they will succeed
2. immersion in a developmental education program
3. utilizing identified learning assistance support services which will assist students in succeeding in their current academic/occupational courses

This systematic assessment and advisement process becomes the base upon which the college builds its developmental education program. A valuable by-product, too, is the information gained on student needs

which shall provide the direction for the next area, the instructional support service.

Instructional Components

This area of our developmental education program includes in-class and out-of-class activities, credit and non-credit activities. Current efforts including basic skills offered by the Language Arts department, the English Lab tutoring, the ILE tutoring, the Instructional Resources Laboratory, the VEA tutoring program, EOPS tutoring and courses offered by occupational departments are laudatory. However, the Basic Skills subcommittee reports all recommend that a more comprehensive, coordinated program with an appropriate commitment of college resources be undertaken.

The Developmental Education Program should include these instructional related areas:

1. remedial basic skills and ESL classes
2. adjunct courses on study and learning skills, vocabulary, and basic skills to augment specific content courses
3. basic skills and subject matter tutoring
4. mediated instruction (including computer aided instruction) and mediated tutoring
5. courses dealing with students' social and emotional concerns

Permeating all of these instructional activities should be the assumption that developmental education is merely a means to an end--the end being the successful transfer of the skills and knowledge developed to enable students to succeed in their academic and occupational coursework. Therefore, to the extent possible, all activities, whether in class or adjunct, should be content specific and related rather than an autonomous body of knowledge and skills to be mastered. A corollary is

that content area instructors--both academic and occupational--will include opportunities for students to apply and practice the developmental skills and knowledge within the context of the course requirements and subject matter learning activities.

We are once again emphasizing the following: the extent and pervasiveness of our students' underpreparedness require a campus-wide attack plan; the problems cannot be resolved merely through the dedicated efforts of a few disciplines, categorically funded programs or individuals. A successful endeavor will require a total campus commitment of participation, support, and resources.

Before describing in detail the various instructional components, we are recommending that, to the extent possible, courses be modularized and provision for individual differences be made. Such strategy best provides for differences in learning styles and learner needs. Course modularization allows students to concentrate and practice on only those areas of identified need and allows learning specialists to design and to plan more precise and effective individualized student developmental programs. Provision for individual differences includes removal of artificial time constraints, inclusion of mastery learning and competency based instruction concepts, accommodation to various learning styles, departure from total dependence on the traditional classroom environment, and greater utilization of alternative learning delivery systems. Finally, we caution that the institution, in its attempt to individualize, guard against a proliferation of developmental education courses. We must be ever vigilant that in our zeal to remediate and/or raise basic skill levels we do not produce a group of students who have

acquired no other skills or knowledge.

Basic Skills Curriculum. The following developmental education courses are presently approved for offering by the college:

Developmental Communications 22	(Communication Laboratory)
English 21	(English Fundamentals)
English 46	(Reading and Study Improvement)
English 47	(Reading Clinic)
English 64	(Reading and Writing: Basic Skills)
English 84	(College English as a Second Language I)
English 85	(College English as a Second Language II)
English 86	(College English as a Second Language III)
Math 19	(Algebra Review)
Math 29	(The World of Numbers)
Math 30	(Arithmetic for College Students)
Personal Development 2	(Inter-personal Relationships)
Personal Development 4	(Career Planning)
Personal Development 7	(Seminar on Women)
Psychology 9	(Introduction to College)
Psychology 20	(Reading and Study Improvement)
Psychology 21	(College Reading Skills)
Psychology 24	(Scholastic and Personal Development)
Psychology 43	(Principles of Group Dynamics I)
Psychology 44	(Principles of Group Dynamics II)

It is recommended that a review of present developmental education courses occur and that

1. specific prerequisite writing, reading, math levels be established for each course
2. all developmental education courses be organized so that they may be taught traditionally or on an individualized basis
3. to the extent possible, courses be modularized
4. in those areas of developmental education which presently are not in the curriculum, appropriate courses be developed. There appears to be a need for a study skills or techniques of learning course(s), an integrated course(s) which would allow students to improve all deficiencies in a coordinated manner, and adjunct reading, English, and vocabulary courses.

With the addition of these courses, it is felt that learning specialists and counselors will have a sufficient and appropriate number of courses to recommend to and place students. Within the framework of this developmental education curriculum, provision for individual differences may occur if courses are modularized, courses are offered in both a traditional and a flexible time mode and students may select from among different delivery systems and learning environments.

Course Augmentation Curriculum. This component presents both the greatest challenge and the most potentially productive. Because the developmental education activities will be content specific and directly related to educational goals, it is hypothesized that students will more readily enroll and will be motivated to succeed. In addition, the problem of mainstreaming is automatically resolved. The challenge, however, is to involve those learning specialists (the content faculty) who possess the knowledge to develop meaningful courses and to devise courses which service several disciplines (to prevent unwieldy, ineffective proliferation). A number of disciplines, particularly in the occupational fields are already offering content specific augmentation

courses. They include the following:

Vocational Art 112	(The Metric System)
Automotive Servicing 111	(Basic and Applied Mathematics)
Automotive Servicing 117	(Oral and Written Communications for Auto Mechanics)
Cabinetmaking and Millwork	(Applied Trade Math)
Carpentry 113	(Trade Mathematics I)
Carpentry 116	(Basic Math for Carpenters)
Carpentry 128	(Trade Math for Carpenters)
Carpentry 244	(Applied Geometry for Construction)
Inspection Technology 27	(Written Communications for Construction and Inspection Personnel)
Sheet Metal Work 114	(Applied Sheet Metal Mathematics I)
Sheet Metal Work 123	(Applied Sheet Metal Mathematics II)
Sheet Metal Work 133	(Applied Sheet Metal Mathematics III)
Business 31	(Business English)
Business 32	(Business Communications)
Business 38	(Business Computations)
Supervision 11	(Oral Communications)
Supervision 12	(Written Communications for Supervisors)
Office Administration 34	(Business Vocabulary & Spelling)
Assistant Cook 107	(Applied Mathematics for Assistant Cook)
Architectural Drafting 112	(Basic Mathematics)
Architectural Drafting 113	(Technical Mathematics I)
Architectural Drafting 122	(Technical Mathematics II)

Mechanical Drafting 112	(Basic Mathematics)
Mechanical Drafting 113	(Technical Mathematics I)
Mechanical Drafting 122	(Technical Mathematics II)
Mechanical Drafting 253	(Engineering Descriptive Geometry)
Drafting Room Assistant 102	(Basic Mathematics of Drafting)
Drafting Work Study 102	(Work Study Basic Mathematics)
Drafting Work Study 122	(Work Study Technical Mathematics)
Drafting Work Study 132	(Basics of Calculators and Trigonometry)
Air Conditioning & Refrigeration Technology 116	(Technical Mathematics for Air Conditioning I)
Air Conditioning & Refrigeration Technology 126	(Technical Mathematics for Air Conditioning II)
Electrical Construction and Maintenance 173	(Electrical Mathematics I)
Electrical Construction and Maintenance 174	(Electrical Mathematics II)
Electrical Supplies and Equipment Processing 114	(Basic Mathematics for the Electrical Trade)
Electronics Assistant 109	(Introduction to Electronics Mathematics)
Electronics Assistant 111	(Basic Electronics Mathematics Theory and Shop I)
Electronics Assistant 112	(Basic Electronics Math Theory and Shop II)
Electronics Technology 111	(Electronics Mathematics)
Electronics Technology 240	(Electronics Technical Mathematics)
Electronics Technology 241	(Advanced Electronics Mathematics)

Health Occupations 3	(Health Occupations Communications)
Automatic Vending Machines Technician 214	(Automatic Vending Applied Mathematics I)
Automatic Vending Machines Technician 223	(Automatic Vending Applied Mathematics II)
Machine Shop 113	(Machine Shop Mathematics I)
Machine Shop 123	(Machine Shop Mathematics II)
Machine Shop 133	(Machine Shop Mathematics III)
Machine Shop 143	(Machine Shop Mathematics IV)
Machine Shop 178	(Introduction to the Metric System of Measurement)
Plastics Technician 143	(Applied Mathematics)
Welding - Gas and Electric 113	(Applied Mathematics I)
Welding - Gas and Electric 128	(Applied Mathematics II)
Mechanical Assistant 5	(Applied Mathematics for Mechanical Assistants)
Printing - Photo Offset 122	(Graphic Arts Applied Mathematics)
Mathematics 39	(The Metric System)
Mathematics 48	(Technical Mathematics I)
Mathematics 49	(Technical Mathematics II)
Mathematics 50	(Technical Mathematics III)
Water System Technology	(Water and Wastewater Mathematics)

The list above shows that the various campus disciplines have been aware of student deficiencies and have, therefore, developed numerous adjunct courses in math. The recommendation is made that a review of the math adjunct courses be undertaken to consider whether there is a possibility tnat such courses are similar in content and whether a more productive use of resources would occur if such overlapping courses were

consolidated, reorganized, or removed from block programming.

In addition, for existing adjunct courses, it is recommended that each discipline consider one or more of the following:

1. making these courses available prior to enrollment in the program (particularly in those areas which have extensive waiting lists)

2. working with the Instructional Media Staff, the Teaching Resources Center, and the developmental education specialists to develop study aids, self-paced materials, independent study media, and reinforcement aids (as appropriate) for use at home or in the Learning Resources Center

3. developing alternative delivery systems

4. providing input to the developmental education staff for any additional adjunct courses that need to be developed.

There appears to be a void in adjunct courses in the language arts area (reading and writing). It is recommended that reading and writing adjunct courses be developed and/or existing development education courses, to the extent possible, be content related (particularly in the occupational disciplines). However, it would not be desirable to develop the proliferation of such courses as has occurred in the area of math.

The Education Code has mandated that by July 1, 1983, all students who are granted degrees or certificates must demonstrate competency in reading, in written expression, and in mathematics. Second, the college has an obligation to not only train students for occupations currently available but also to provide students with those skills necessary to adapt to a work environment changing and influenced by the continuing development of high technology which appears to be impacting many if not all occupations. Not only must literacy be considered the primary

basis upon which all other occupational knowledge and skills are developed but, surely, the college's most basic mission must be the development of literacy. The October 18, 1982 issue of Newsweek emphasizes this need for literacy: "...workers of the future will need more than solid grounding in math, science, computers and technical fields." Corporate leaders contend that there needs to be a stress on basic skills--reading and writing. "Workers in a rapidly changing job market need to be generalists, flexible enough to change course and train for new careers with a minimum of disruption, and for that they will need a goodly dose of very traditional skills."

Mediated Learning Activities. A third component in the instructional area deals with mediated instruction and mediated learning assistance. The present Instructional Resources Laboratory has been effectively developed in terms of function, hardware, and software. It currently enjoys ready campus acceptance and is successfully meeting the instructional needs of many, many students. It truly reflects the philosophy espoused here of developmental education--developing students to their fullest educational potential. Recommendations are directed at providing the resources to enable the laboratory to continue on its present mission. Funds are required for the following:

1. additional hardware and software (both in the basic skills, the academic, and the occupational areas)
2. additional computers and instructional programs to provide computer assisted instruction and computer managed instruction
3. much additional space allocation
4. additional paraprofessional personnel who will assist students, faculty, and Learning Resources Center staff. At the minimum, one instructional assistant is required in computer science.

Tutoring. A fourth component relates to tutoring services. There currently exists a number of successful and highly utilized tutoring programs, but none are college funded.

Before proceeding, some thought should be given to the current VEA tutoring program. It is this writer's opinion that tutoring services can be effective when provided by paraprofessionals and by peers. This statement is not to be construed as critical of the current VEA project but rather as critical of the fact that various disciplines on the campus have benefited from the services of the VEA certificated staff (by allowing them to teach, not tutor) without a corresponding contribution of resources. Current VEA certificated staff are teaching basic skills, discipline specific adjunct courses, and team teaching. If this portion of the program is performing a needed and valued function, then it should be absorbed by the college, placed on a regular funding basis and appropriate courses scheduled and college credit granted.

Current tutoring activities should be coordinated, stabilized, and expanded. Present VEA, EOPS and handicapped tutoring services are, due to the administrative structure and funding sources, independent of one another. Such programs need to be coordinated so that resources, to the extent possible, may be shared and more effectively utilized. Both content specific, basic skills, and study skills tutoring by instructional assistants and peer tutors at the appropriate level of service should be supported by the college. The tutoring program is to be coordinated by the Developmental Education Director. Three instructional assistants (one each in English, reading, and math) are required in the tutoring area to tutor and to train and supervise the peer tutors.

The ILE tutor program should be maintained by the college at a level sufficient to serve instructors who wish to participate.

There appears to be a void in tutoring in content specific areas. For example, students in accounting, physics, chemistry, biology, algebra and other courses may need tutoring,but this tutoring is not readily available except to EOPS eligible students. Peer tutors in content specific areas are required. The college must commit general funds to provide tutoring services. Present sole reliance on categorically funded tutoring excludes many students who need this service.

In summary, the instructional area, comprised of four components (basic skills courses, augmented/adjunct courses, mediated instruction, and tutoring) shall be coordinated by the Developmental Education Program director. The director shall broker services of certificated staff; articulate student, program and course needs; provide liaison among counseling, college discipline, and Learning Resources Center staff; and serve as the publicist, advocate, organizer, and expeditor for campus developmental instructional activities.

Curriculum and Professional Development

It appears self-evident that with the magnitude and pervasive nature of the problem the present commitment of resources is inadequate and the likelihood of diverting resources sufficient to provide an adequate program is impossible. Our developmental efforts will not have a significant impact if we rely solely on the activities of Learning Resources Center staff, the Developmental Education Program director, and developmental education faculty. While that group will serve as the backbone of the total effort, all other certificated staff will also have a role. We envision all certificated staff participating in one or more of the following activities by:

1. apprising the Developmental Education director of adjunct courses which need to be developed

2. assisting Learning Specialists in the development of adjunct courses

3. examining teaching strategies and organization of their courses and, where appropriate, incorporating methods and providing for the learning needs of the underprepared and/or non-traditional learner

4. just as math has apparently been infused throughout the curriculum, including opportunities for students to practice reading and writing across the curriculum

5. apprising the counseling and guidance staff of course requirements particularly in the areas of minimum reading, English and math levels so that appropriate guidance and placement information may be communicated to students

6. becoming knowledgeable about available instructional support/learning assistance courses, services and activities and assuming responsibility for the early identification and referral of students who would benefit from participation

7. participating in professional development activities such as workshops, seminars, and special projects on development of curriculum and course management for the underprepared or non-traditional learner.

What we are advocating is a collaborative endeavor among faculty, instructional support staff, counselors, media, and the Teaching Resource Center--this collaborative effort to be facilitated by the Developmental Education Program Director, the designated counselor(s) for assessment, the Media Center Director, and the Teaching Resource Center Director.

Many of the professional staff have already independently engaged in these activities. The support and coordination available with the implementation of this plan will enable many more faculty to initiate curriculum and professional development activities.

Evaluation

As in any activity, a request for commitment and resources carries a corresponding obligation for the concept of accountability. It is my belief that the process of evaluation must be an integral part of any such large-scale endeavor, particularly in this case where outcomes are not readily apparent unless carefully sought. Included in the appendix is an article by C.C. Walvekar entitled "Evaluation of Learning Assistance: Some Practical Suggestions." Ms. Walvekar discusses purposes, content, methods, and implementation of evaluation. It is recommended that an early task of the Developmental Education director be to determine a plan for evaluation, in collaboration with our campus researcher. Ms. Walvekar states that data gathered through the evaluation process are required to "...help both evaluators and administrators make appropriate decisions about program operation, modification, continuation, or deletion." (Walvekar, 1981)

STAFFING

The reader may have wondered about the failure to speak in specifics about the certificated staff who will be teaching in the Developmental Education program. Such is the case because this proposal is not recommending the permanent reassignment of any certificated staff to the program. This proposal does recommend that initially a minimum of four full-time (or equivalent) certificated faculty participate in the program. They shall be staff who volunteer to participate in the program and who shall retain seniority rights and reassignment rights within their home departments. The four certificated staff shall be the Director and 3 learning specialists, one each in reading, English, and mathematics. With the exception of the Director, who shall serve for two years, the learning specialists shall serve for one year with the opportunity to request reassignment to the program on a year-to-year basis. It is envisioned that the learning specialists in the program shall offer open-entry, open-exit modularized developmental education or content-adjunct credit courses, while the traditional semester length developmental education courses will continue to be offered by the Language Arts and Math Departments. As present certificated staff are fully utilized, it will be necessary, in order to implement this plan, to hire four additional certificated staff. Such staff, as additions to the appropriate departments, shall join the pool of faculty who may volunteer to serve as Director or one of the three program learning specialists.

In addition to the certificated staff, it is recommended that one intermediate clerk-typist and four instructional assistants be hired to staff the program activities (one in computer science reporting to the Instructional Resources Lab Director, and one each in English, reading, and math reporting to the Developmental Education director).

The staff as suggested is what is minimally required to implement the program as proposed. The hypothesis is that the level of student participation will increase to the extent that eventually additional staff will be required.

BUDGET

Certificated Staff				Fiscal Year
1	TCI	D basis	(3,068 x 12)	$36,816
3	Instr	C basis	(2,883 x 3 x 10)	86,490
Classified Staff				
4	Instr Asst	C basis	(1268 x 4 x 10)	50,720
1	ICT	B basis	(1032 x 11)	11,352
A & I				- - - - - - -
Equipment (approximations)				
	Furniture			25,000
	Computers			42,000
	Supplies			20,000
Unclassified Staff				
	ILE Tutors			I5,000
	Peer Tutors			25,000

CONCLUDING REMARKS

This plan is comprehensive, but so are the needs of our students. The resources required for implementation are of considerable magnitude, but any lesser undertaking brings into question our commitment to access and excellence. Surely, our most basic obligation to our students is to assure their developing the literacy required to adjust to the one most predictable element which shall influence the future--that of constant change in the personal, social, work, and physical environments.

APPENDIX

Los Angeles Trade-Technical College

intra-college correspondence

DATE: February 23, 1982

TO: Dr. Lakin

FROM: L. Hancock, Dorothy Smith, Wylene Moore, Pat Hollingsworth

SUBJECT: IMPROVING BASIC SKILLS ALREADY ON CAMPUS

Below are some of the suggestions we have developed for improving the coordination of current basic skills services now on this campus. They are listed at random, not in priority order, as a way of stimulating discussion and consideration.

Implementation of these ideas and proposals may call for some faculty release time, facilities alterations etc. Strong leadership from the office of Instruction will be necessary.

1. An orientation course (Psychology 9) for entering students should be developed. This course would be offered, ideally, in the 2 weeks before fall semester begins and offer a concentrated program of instruction in study skills, personal and vocational goal-setting, orientation to the college and its offerings, etc.

2. Many modular classes and open-entry/open exit classes should be developed in basic skills subjects, to be given in the LRC if possible. This would give students who are having difficulties in their classes a chance to enroll in a class in which they could improve skills and also collect units. Current semester structure makes it very difficult to direct such students since past offerings of modular classes have not attracted students, better communication and publicity will be necessary to make this idea work.

3. A cooperative liaison should be developed between our college and the nearby adult schools. Often they offer services which are more suitable to entering students than ours are.

4. The college should have an admissions policy which CLARIFIES the "open door" concept. Does the "open door" mean that any student must be given the chance to enroll in any program? Or how has it been interpreted by the legal eagles at the district?

5. The current VEA tutoring Project should become a project of the instructional program. The demonstrated success of the program and the response of the Trade instructors has proved that we need the VEA on a permanent basis.

6. The strengths of the VEA should be promoted in the Language Arts Department, via interaction between VEA and Language Arts Department staff. Regular meetings of the two groups of instructors could help break down barriers between them.

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7. We should consider Los Angeles Trade Technical College as a vocational college, and encourage trade departments to require a minimum level of basic skills achievement from all their graduates. Perhaps specific basic skills classes should be incorporated into the trade program course of study.

8. Trade instructors as departments should give language arts and math instructors a list of skills which their entering students will need to be successful in given areas. Each language arts instructor should write a paragraph or so in which s/he tells what his/her teaching mode/method is and what they stress in the specific class.

9. The basic skills courses should be offered on a "credit/no credit" basis.

10. Each department should develop an "early warning system," where students who need basic skills instruction and counseling can be directed to it. This will require a better flow of information from everyone involved.

11. Regular publications should be distributed explaining basic skills programs - all of them.

12. VEA tutors should visit Language Arts Department classes, if requested, to tutor vocational students.

13. The college should assign a Coordination of Basic Skills. This person could be a counselor or an instructor from a basic skills instruction area. This coordinator would recommend programs, develop liaison between various basic skills groups, identify students with basic skills needs, maintain communication with students on a follow-up basis.

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Los Angeles Trade Technical College

Intra-college Correspondence

Mr. Jones (Automotive)	Mr. Biggs (Printing)
Mr. Maccani,	Mrs. Hancock
Mrs. Hollingsworth	Mrs. Hartwig
Mrs. Verdugo	Mr. Carter
Mr. Eckes	Mrs. Moore
Mrs. Smith	Mrs. Pineda
Mr. Wood	Mr. Brown
Ms. Grisby	Ms. Langford
Mrs. Meyer	Mr. McKinney
Mr. Shapiro	Dr. Simpkins
Ms. Winston	Mr. Sachs
Mr. Veley	Mr. Williams
Mrs. Wong	

DATE: March 2, 1982

TO: See Distribution List

FROM: Thomas G. Lakin, Dean of Instruction

SUBJECT: Sub Committee Report and Scheduled Meeting.

Attached is a sub committee report which responds to two of the three questions posed at the conclusion of our last committee meeting.

Please review this report and attend the next meeting of our basic skills group. Teh next meeting has been scheduled for March 26 at 1:00 p.m. in A-102. If you have any agenda items please inform Linda Timmons in the Office of Instruction no later than Wednesday, March 24, 1982.

With your continued positive contribution to the basic skills project, I'm certain that we will systematically develop a model basic skills program.

TGL:vo

cc: Mr. Stevens

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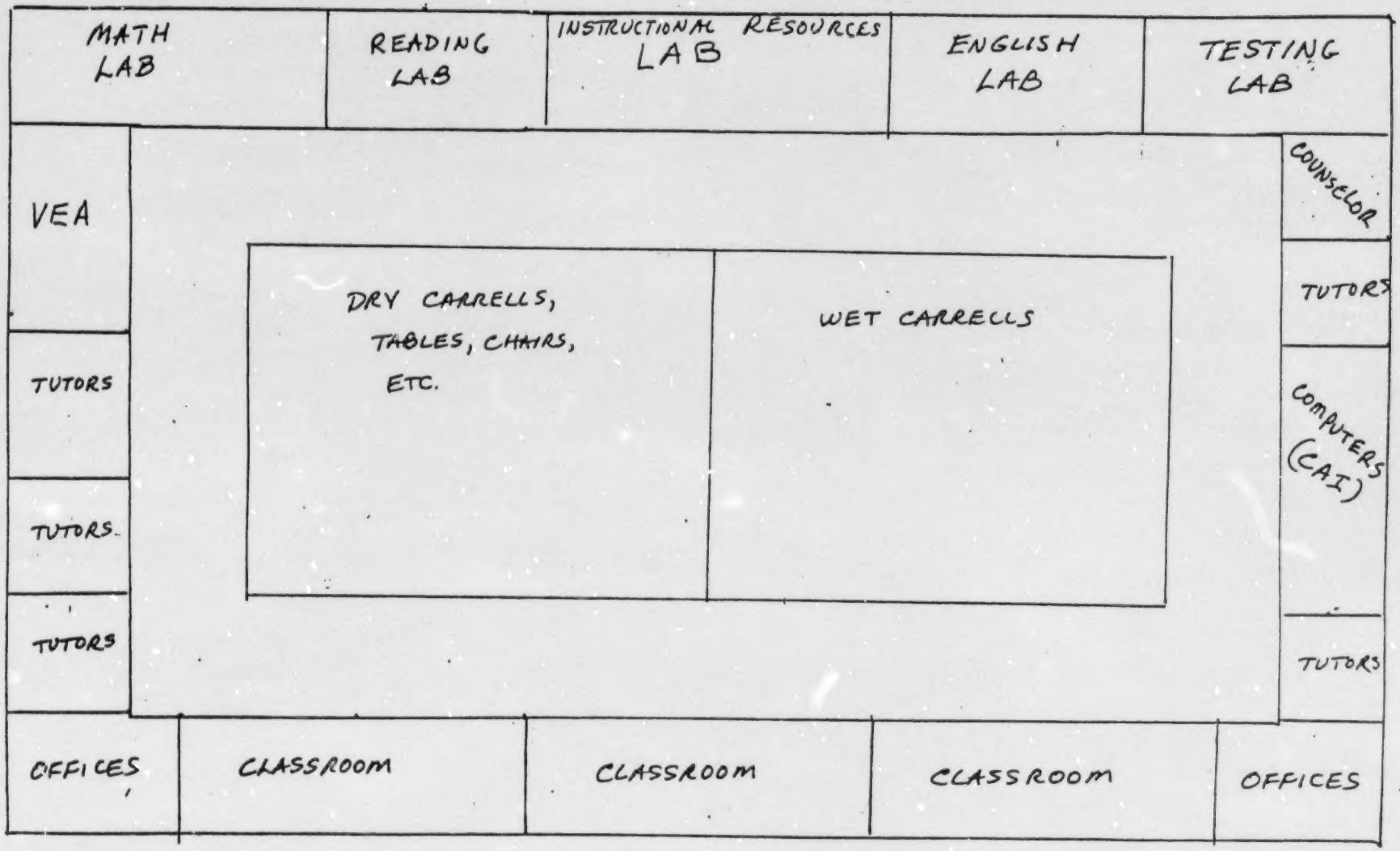
MATH LAB
READING LAB
INSTRUCTIONAL RESOURCES LAB
ENGLISH LAB
TESTING LAB
VEA
TUTORS
TUTORS
TUTORS
DRY CARRELLS, TABLES, CHAIRS, ETC.
WET CARRELLS
COUNSELOR
TUTORS
COMPUTERS (CAI)
TUTORS
OFFICES
CLASSROOM
CLASSROOM
CLASSROOM
OFFICES

B-2

General Components
for Consideration

1. All Basic Skills Instruction English (47, 21, 64, 84, Speech 9), Math (29, 30) and Psychology 9 classes be conducted in Basic Skills area with additional classes as needed.

2. All the above courses be open entry/open exit, modularized, competency based, and credit/no credit - Exit Exam.
Most of the above courses be self-paced with positive attendance.
(Clarification of attendance accounting procedure to show wsch.)

3. Students not completing course at end of semester will receive IP grade.

4. Initially, some of the above courses may be classroom type.

5. All the above courses have certificated instructors or instructors-of-record.

6. Program 100 money will be found to support VEA & EOP & S programs so that they could serve all students in a permanent, on-going part of the college in a non-segregated manner.

7. VEA program will support basic skills instructors as well as continue math function in Trade area (which will produce Math 29 or 30 grades from certificated instructors of record).

8. Final modules in each course will be oriented to the specific career interest of the student enrolled to provide a bridge into transfer and vocational instruction.

9. A full-time counselor will be assigned on-site to all students participating in this Basic Skills Center. Efforts will be made to assure that this counselor is trained in vocational education, career counseling transfer requirements and identification of learning disabilities.

10. All Counselors and Instructors of the college will refer students with Basic Skills needs to the Basic Skills Center on a continuing basis. These students will be counseled, re-assessed and assigned to programs which will improve their chances for success.

11. The instructional lab will serve both this basic skills program and the campus-at-large.

12. This basic skills program will be interdisciplinary. It will be responsible to various participating departments, reporting to the Dean of Instruction. All efforts will be made to coordinate with the appropriate Deans.

13. This basic skills program will be directed by a certificated person chosen from and by participating certificated personnel.

14. Efforts will be made to support the Basic Skills program with appropriate funding, for example: ICT, tutors, paraprofessionals supply and equipment budget.

15. All efforts will be made to staff the basic skills center with persons who express committment to this program.

16. Services will be made available to evening, Saturday and Summer school students. Sufficient classes must be scheduled to meet student needs.

17. Curricula will be studied to incorporate co-requirements for trade and academic programs, as needed.

18. Staff development, in-service workships will be an integral part of this basic skills programs.

19. Establish a Basic Skills Advisory Committee.

Basic Skills Report
Gwyn Enright

On June 15, 1982, the Los Angeles Trade Technical College Dean of Instruction Office through the Los Angeles Community College District contracted me to study the present operations of the Learning Resources Center in order to plan for an expansion of the learning assistance activities. Recommendations were to be submitted in two phases: 1) and interim physical accommodation of the proposed learning assistance activities in the LRC, and 2) plans for a remodeled LRC to accommodate the proposed learning assistance activities. Therefore, as discussed with Evelyn Wong, Assistant Dean of Instruction, this report will focus on the physical setting for Los Angeles Trade Technical College learning assistance activities and will comment on the learning assistance program itself only when function informs location.

ON SITE INVESTIGATION

I visited Los Angeles Trade Technical College on six different occasions from July 26 to September 20, 1982. I observed students working in the LRC, discussed learning assistance activities with LRC staff, toured the physical plant and interviewed other campus faculty involved in offering basic skills classes and services. The individuals who acted as resources include Harold (Mike) Eckes, Betty Hartwig, Joyce W. Livingston, Robert Maccani, Jean McTyre, Doris Ramey, Dorothy Smith, William F. Troost, and Thelma Jones. Relevant documents reviewed as part of the on site investigation are listed in Appendix One.

INTERIM ACCOMMODATION

Classes. At the time of the on site investigation, some basic skills classes were being held in classrooms located away from the Center and plans were under way for a pilot project to hold certain basic skills classes in the display gallery area of the second floor. Also, group tutoring was located on the first floor of the LRC. Problems included difficulties referring basic skills students from one area to another without losing them in the shuffle, lack of quiet study

space for individual students motivated enough to want to study in the LRC, and an inadequate means for systematically separating noisy from quiet activities. In addition, the display gallery area appears to convert to a make-shift, fishbowl type of classroom which might be somewhat demoralizing for students and instructors alike. During an interim period, classes might be scheduled in the two rooms adjacent to the Instructional Resources Laboratory Issue Room. (See illustration) At the present time, both these rooms are used for language practice, computer assisted instruction and individualized reading drill. However these activities, while all individualized and all hardware based, are not compatible since verbal language drill interferes with student reading drill and practice.

Anticipated problems stemming from designating these rooms skills development classrooms might include relocating the microcomputers which are kept here in order to maintain security, to monitor usage and to maximize a network system. Suggestions for relocation of this hardware are discussed under the sub-heading, Individualized Mediated Instruction. A second problem might be large groups of students using the central stairway and elevator at the same time in order to attend scheduled classes. However, to some extent, student traffic flow is determined presently by class schedules and, hopefully, basic skills classes will be able to maintain the necessary low student-teacher ratio for effective skills remediation.

Tutoring. At the time of the on site investigation, VEA, EOPS and Witing Laboratory tutoring was located on the first floor of the LRC. Tutoring was taking place in both the small study skills/tutorial rooms and a larger area intended for paperback reading. VEA tutoring had been located on the second floor but recently had been moved to the first floor where the program would have more room and where tutoring sessions would be less disruptive to other library activities. This first floor arrangement means that basic skills students do not have ready access to resource materials for skills development; these are located on the second floor in the Media Resources Lab. Another problem seems to be that there is no real space set

aside for the burdensome data gathering, periodic accounting, student scheduling and monitoring that inevitably accompanies tutoring programs, especially categorically funded tutorial services. Unfortunately, as part of the interim plan, since the second floor location was not feasible, tutoring may have to remain on the first level, separated from the Instructional Materials Laboratory. However, some steps can be taken to improve services to students. First, a sub-set of tutors could be trained as liaisons to help insure tutees are guided from the tutoring area to the lab. Thoughtfully trained, these tutors could also introduce tutees to the lab materials available, the check-out procedures, and the correct operation of lab equipment. Hopefully, the liaisons could alos be on hand to do some troubleshooting in case students have minor problems while working with laboratory resources.

Individualized Mediated Instruction. Currently, mediated basic skills activities are taking place alongside supplementary mediated academic adjunct activities on the second floor. This is an ideal situation in which centralization proves cost effective while, at the same time, the stigma often associated with remediation is avoided. These activities could be expanded along the north section of the LRC. As discussed with the lab coordinator, language skills equipment might be more readily used in the foreign language department; limited supplemental language practice might still be offered in the lab setting by installing several audio trainer recorders. However this language practice and other noisy activities, such as ear training, computor assisted instruction and group video viewing could be set apart from quiet areas if the space for individualized mediated delivery were expanded. For security, equipment could be bolted into carrels or onto tables. In addition, dust covers are available for almost all the hardware. Cabinets are commercially available and can be installed in attractive but space conserving configuations. (See Appendix Two) Steps to reinstitute a computer network via cable would need to be investigated, however. Once again, it is recommended that a sub-set of tutors or educational technicians be trained and then assigned to

circulate through the student working area in order to answer questions about procedures, equipment and programs.

Management. Some of the sense of fragmentation felt by those involved with the Basic Skills Program might stem from a lack of proximity and a lack of centralization efforts in managing routine aspects of the programs. While a separate Basic Skills Department apparently proved unworkable, some space might be set aside on the first floor to allow for sharing of clerical staff. This might lead to a more effective pooling of resources. Also, on the second floor, the Instructional Materials Labs Issue Room is not large enough to allow for ready materials check-out or for enough materials storage. During the on site investigation, shelving used for the learning programs in the issue room appeared cumbersome for staff to move in order to locate programs while students waited. For the interim plan, the issue room and testing room could be used for lab management and storage for materials not currently in use. The Intake Desk could be located just west of the current desk. Here, staff could assist students in locating and checking out appropriate programs. This would eliminate a physical barrier that now stands between lab client and the IML staff.

LONG RANGE PLAN

The Learning Resource Center architects and the LRC Coordinator have planned for expanding LRC space along with LRC services. The shelled basement contains over 20,000 square feet. When plans for remodeling the LRC are considered, individuals naturally look to the basement. Most Los Angeles Trade Technical College staff I spoke with are ready to entertain a move to the basement. In addition, most are knowledgeable about the prerequisites of occupancy: an air conditioning and ventilation system, men's and women's restrooms, external exits, security system, and carpeting for a quiet environment. LRC staff have also pointed out that the LRC could not absorb an additional service within current space constraints. Completing the basement would provide space for a centralized basic skills service

with classes, individual and small group tutoring, mediated academic adjuncts, and management of the program all on one level and centrally located on campus. However, while centralization of basic skills programs can be cost effective and can encourage appropriate referrals, not all basic skills activities require the same type of area and some activities are too specialized to justify centralization. In addition, many LRC functions might be suitably housed in the remodeled basement. Many of the LRC activities which are not direct service functions might be housed here.

The Basic Skills Program might be located on the first level of the LRC. The first floor of the LRC serves the goals of the program well: accessibility for students would be assured; visibility would prove beneficial to client usage; and student referrals between program components would be facilitated. Obviously, reorganization of LRC space on the first floor will be necessary. To determine which functions are appropriately housed in the finished basement and where current space allocations on the second floor might be adjusted, I suggest the LRC coordinator and his staff work with the Dean of Instruction and the Assistant Dean of Instruction. I also suggest they examine space alloted to technical services and public services in order to determine an appropriate balance between the two categories of library operation. In his book, The Learning Center: A Sphere for Nontraditional Approaches to Education, Gary Peterson includes an appendix entitled "Survey of Learning Center Facilities Requirements." This outline would be a helpful starting point for these discussions.

Classes. Large group presentations might be scheduled on a time-by-time basis into the present theatres. The television arena (conversation pit) might serve for group orientations to the basic skills programs. The stepped reading alcove along the northwest area of the building might serve for tutor training or in-service presentations. If needed, classroom space would be provided by constructing classrooms along the east and/or west side of the building underneath the second floor extensions.

Tutoring. Tutoring programs could be centralized here. The math, reading, writing (English) and ESL programs might have separate intake tables along the mall. Here is where a student looking for help with his classes or a student referred to the basic skills program could talk to one of the instructors or tutors in order to determine where he or she belongs within the basic skills program. Referrals could be made form these intake areas to other campus agencies or to other components of the basic skills program. Diagnostic testing and more in-depth consultation might take place in the small study rooms along the south wall of the first floor area. Tutoring sessions themselves might take place in one area of the first floor. Administration of the tutoring program should be adjacent and within view of the tutors.

Individualized Mediated Instruction. If the Instructional Materials Laboratory is to continue to serve a cross section of students, a large area must be reserved for the lab on the first floor. Some tutoring sessions might take place in the lab area to allow tutors to use the lab resources with their students. Individualized working areas suited to noisy and to quiet activities, materials storage, a check-out desk, conference rooms, and an office for the lab supervisor might be reserved.

Management. Some program management activities might be more practically located away form the first floor. However, where sharing resources among the basic skills components is feasible, it is recommended on centrally located area or nerve center be set aside to include clerical support, test files, student records, an on-site supervisor and a place where general questions can be answered.

APPENDIX ONE

Relevant Documents Reviewed

Eckes, H., Learning Resources Center Philosophy, 1979.

Eckes, M., LRC Attendance Figures-1979-7/1/82. Memo to President Stevens, Dean Lakin, Dean Grivich, Dean Garay, Assistant Deans, Coordinators, Department Chairs, July 1, 1982.

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Hancock, L. Smith, D. Moore, Hollingsworth, P., Improving Basic Skills Already On Campus. Memo to Dr. Lakin, February 23, 1982.

Library Journal. December 1, 1980 p. 2466.

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Los Angeles Trade-Technical College Catalog 1981-1982.

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Los Angeles Trade-Technical College Map

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Smith, D., Grisby, L., Simpkins, C., Pineda, F., Basic Skills Report-What Are We Doing in Basic Skills at Los Angeles Trade-Technical College, Memo to Dr. Thomas Lakin, October 22, 1981.

Troost, Dr. Bill, Instructional Media Services Request for Services.

Troost, Dr. William. (Ed.) Learning Resources Center News. November, 1980

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A 3648-RT	48"	Single-face Starter	230	700.00
B 3648-RT	48"	Single-face Adder	210	640.00
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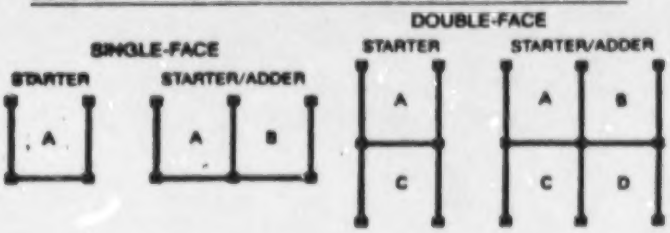
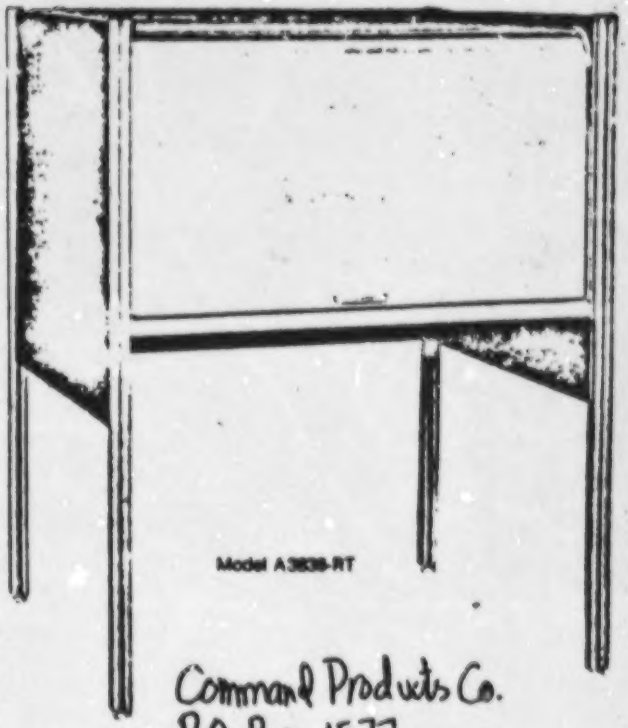
AC7248-RT	48"	Double-face Starter	425	1340.00
BD7248-RT	48"	Double-face Adder	385	1180.00





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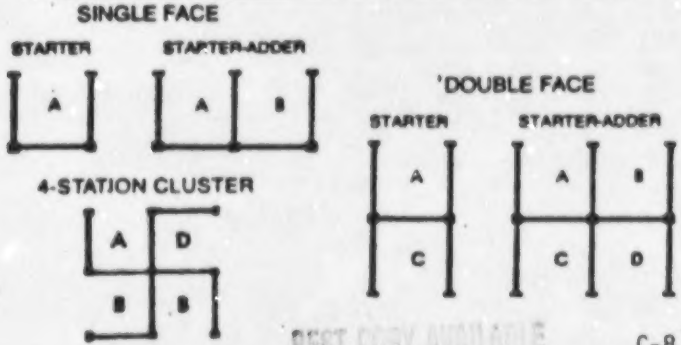
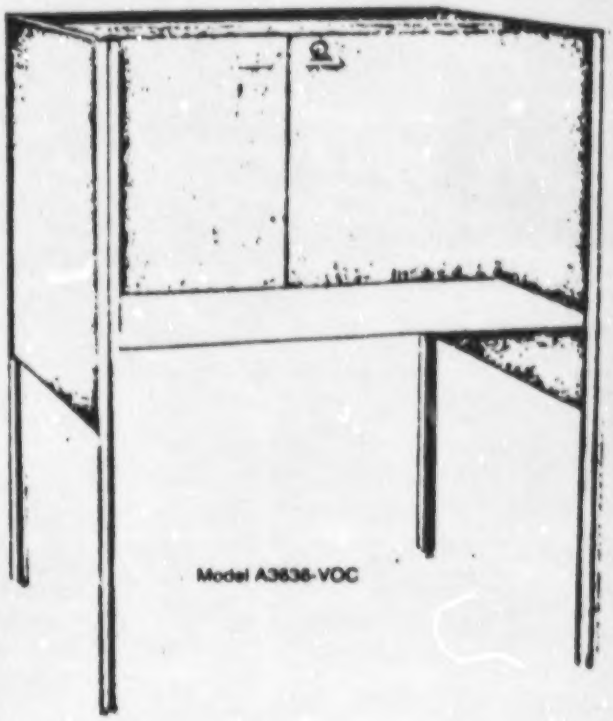
AC7236-VOC	Double-face Starter	270	700.00
BD7236-VOC	Double-face Adder	230	590.00
ADBB3636-VOC	4-Station Cluster	510	1280.00





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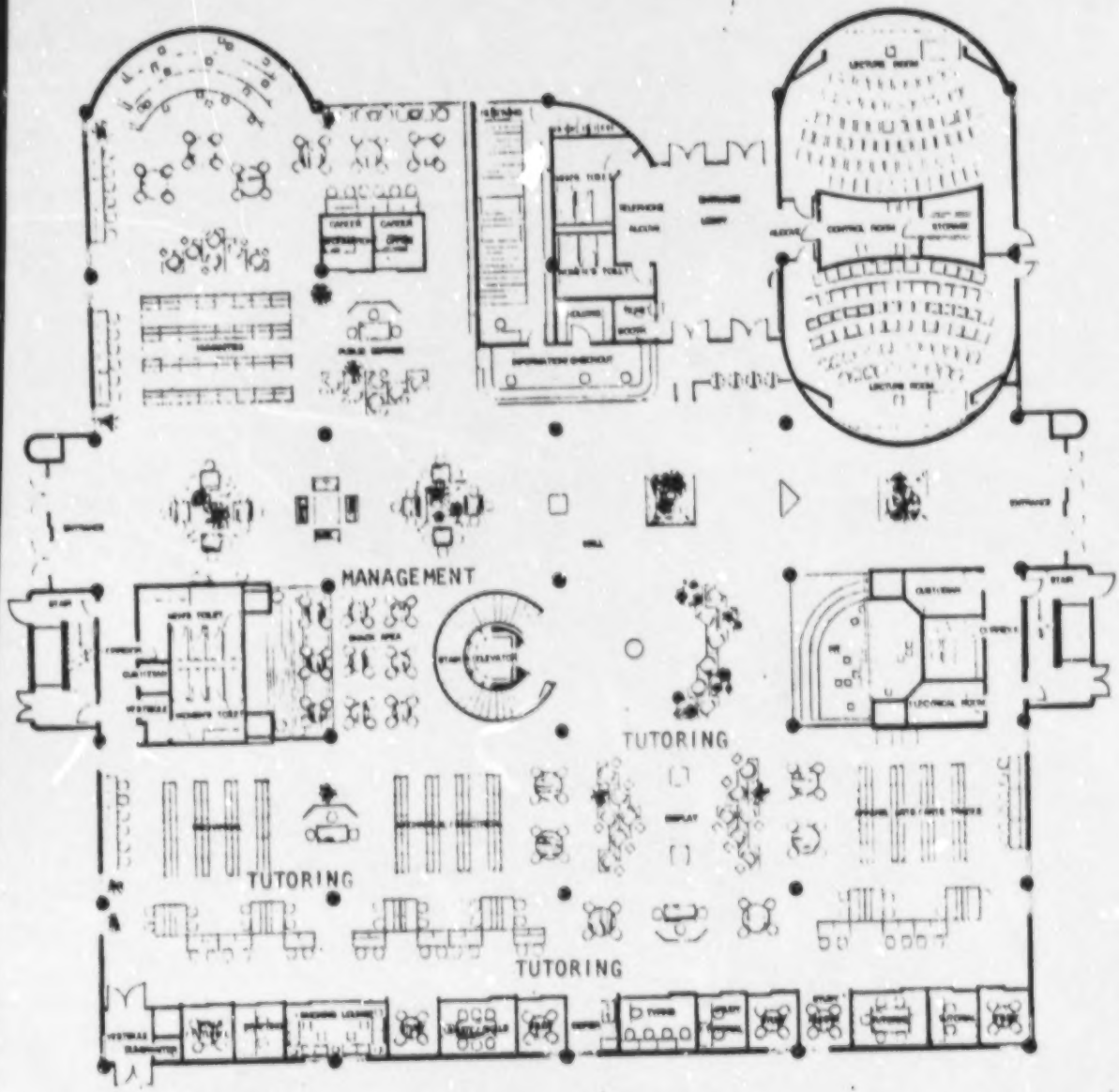

FIRST FLOOR PLAN INTERIM PLAN

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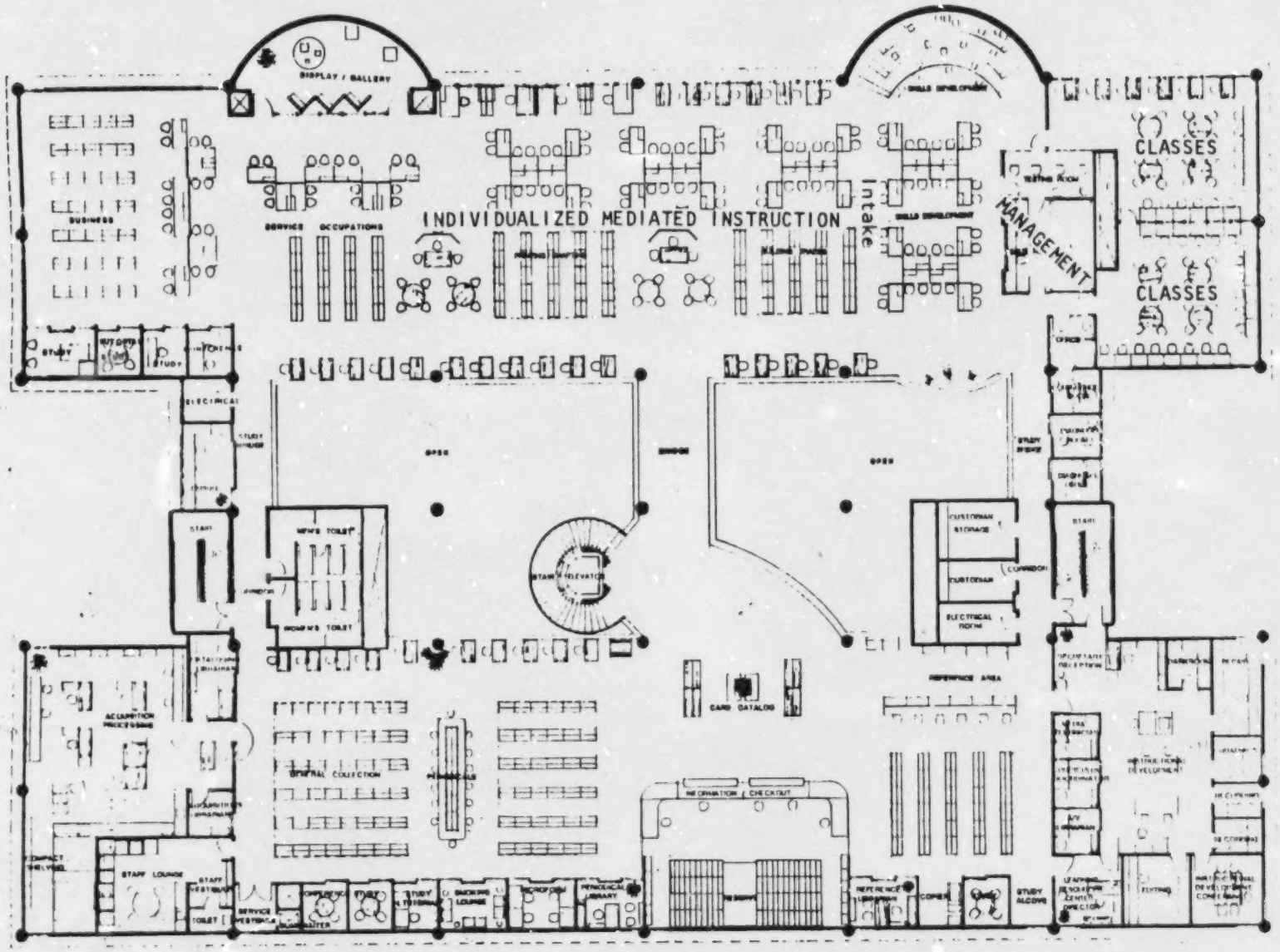

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SECOND FLOOR PLAN INTERIM PLAN

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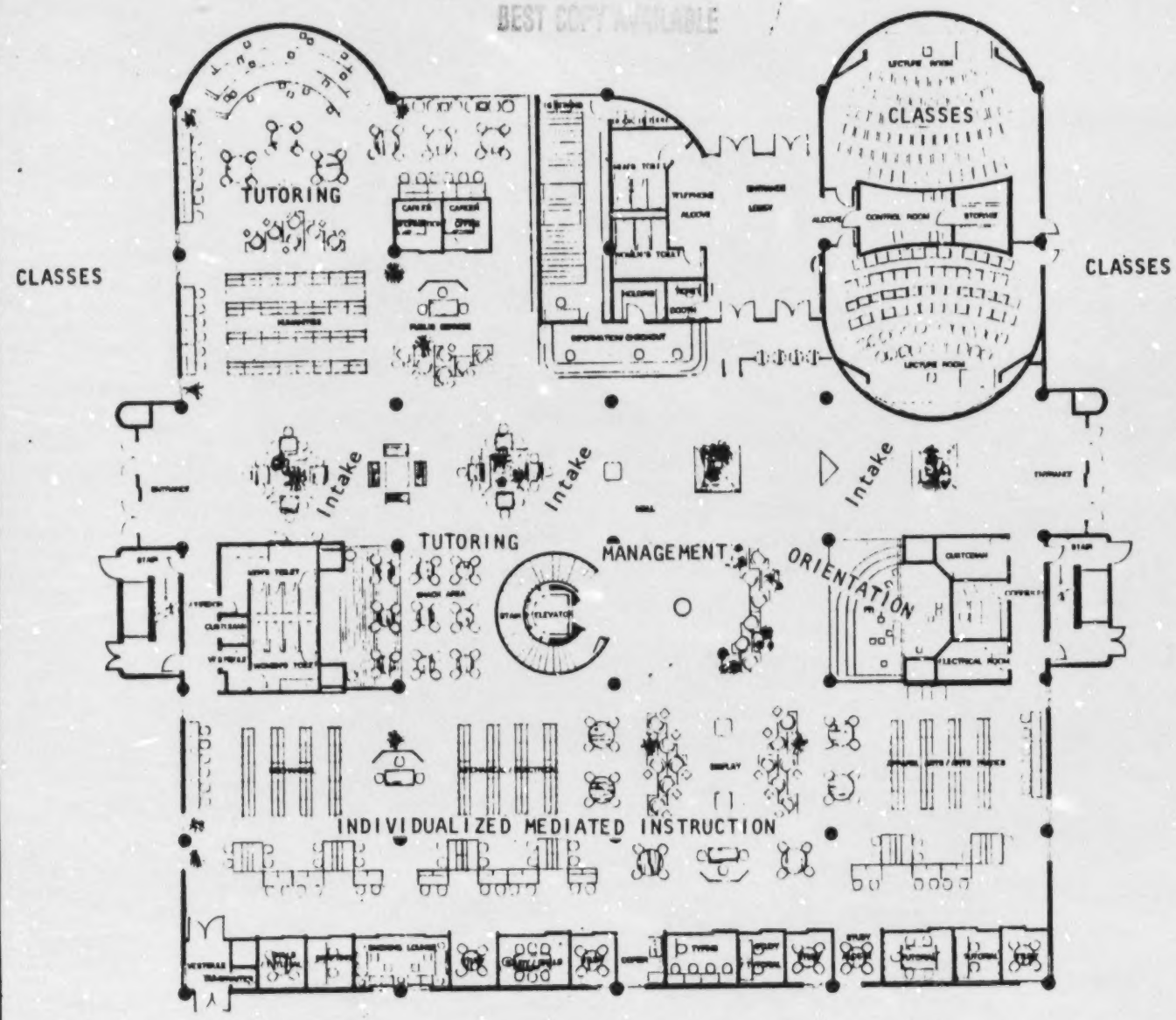


FIRST FLOOR PLAN LONG RANGE PLAN

PROPOSED JOB DESCRIPTION
DEVELOPMENTAL EDUCATION PROGRAM DIRECTOR

Work under direct supervision of Learning Resources Center administrator

Review, update and revise program objectives--in collaboration with the Developmental Education Advisory Committee

Articulate and advocate developmental education program components--including resources, courses, and services

Provide liaison among assessment, counseling/guidance, developmental education, and content area staffs by articulating concerns, priorities, program and course needs

Heighten campus awareness of available developmental education courses and instructional support services; articulate their value to students; and develop and implement a plan for wider participation, particularly among occupational staff and students

Coordinate, supervise and manage tutoring services

- coordinate program 100, VEA and EOPS tutoring by working collaboratively with appropriate staff
- hire, train, and supervise program 100 tutors housed in the LRC including paraprofessionals and peer tutors
- work collaboratively with Language Arts department chair in articulating ILE program needs
- work collaboratively with Instructional Resources Lab director to obtain additional mediated tutoring hardware and software

Encourage faculty to include developmental education units in their courses, to develop adjunct courses, and serve as resource person for developmental education curriculum development

Work collaboratively with the Language Arts and Math/Science department heads to assure scheduling of the appropriate types and quantity of developmental education courses in the LRC

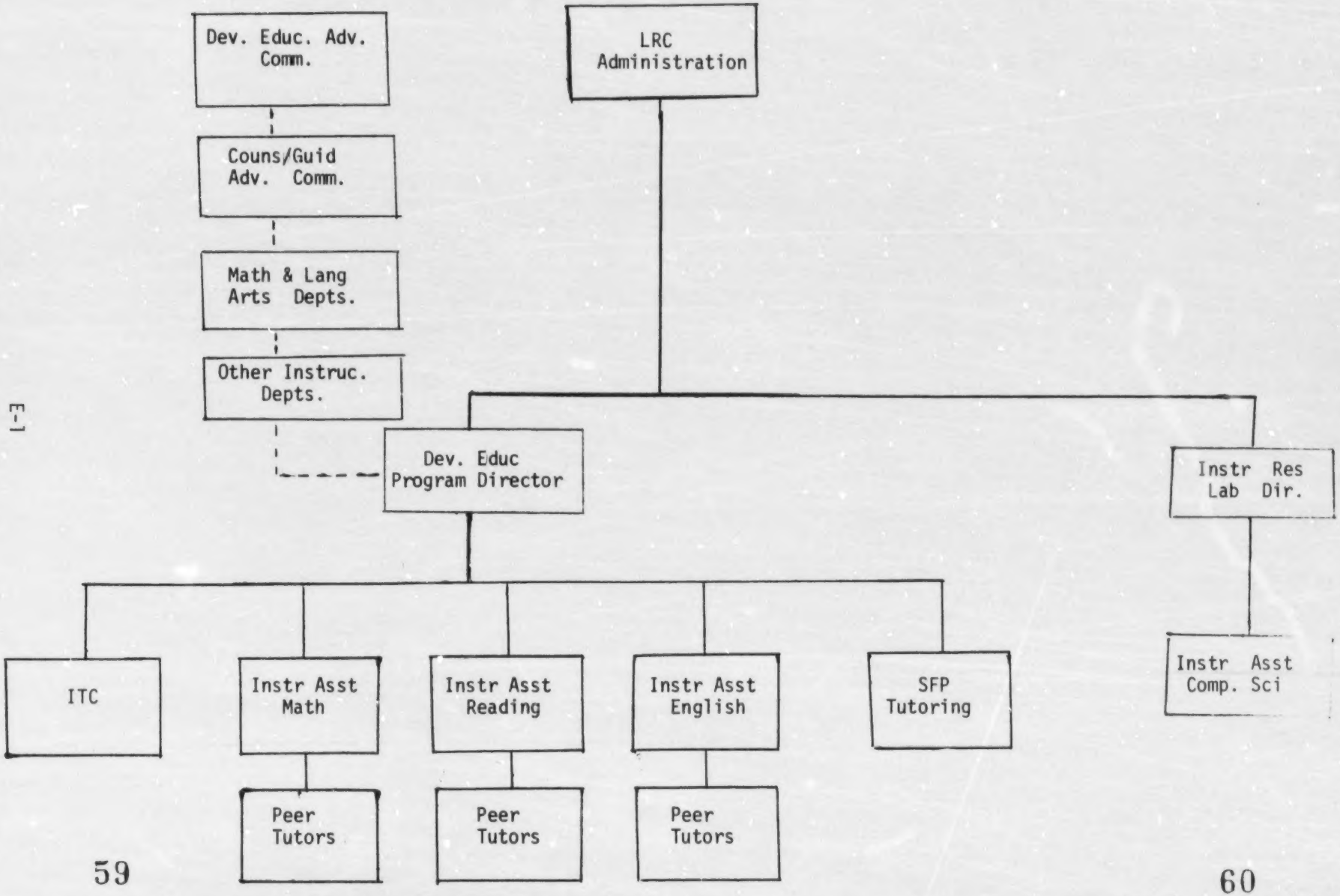
Chair the Developmental Education Advisory Committee

Develop, implement, and supervise an identification, intake, tracking system for students requiring and/or utilizing instructional support services (the responsibility for the assessment, guidance, and placement process for enrollment in appropriate courses would be that of the counselor)

Work collaboratively with appropriate LRC staff to maximize effective utilization of the LRC facility by developmental education program providers and users

Assist in documentation and evaluation activities related to the developmental education program

PROPOSED ORGANIZATION CHART



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identification exercises and review the basic concepts of time management.

Administratively, how does all this work? The core of the Learning Assistance Center at Stanford is its undergraduate program, and I, as Director of the Center, report to the Dean of Undergraduate Studies. To provide for supervision of the Center's faculty/staff program, I receive 10% released time and Personnel, that branch of the University which sponsors courses for staff development, compensates Undergraduate Studies for this time. Under this arrangement, I am responsible for assessing faculty/staff training needs in reading, writing, time management and English as a Second Language, for the development and presentation of courses, and for the administration of the program. This includes finding, hiring and training teachers, supervising their performance, preparing the budget, and coordinating LAC activities with the Staff Development section of Personnel. Personnel compensates directly all the instructors in the program; they are paid as private consultants.

It has been my hope in writing this paper to outline a way that Learning Assistance Centers can reach out beyond their student populations to serve a wider audience, the University's own employees — its faculty and staff. Perhaps some of you, my colleagues at college Learning Centers nationally, will find you wish to expand your activities in this area and will find these suggestions helpful.

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EVALUATION OF LEARNING ASSISTANCE: SOME PRACTICAL SUGGESTIONS

Carol Clymer Walvekar
University of Texas at El Paso

Common to most definitions of evaluation is the idea that it is a judgment of the worth of something. Discovering the "worth" of a program, material, objective, instructional method, or person is a time-consuming, complicated, and frequently threatening endeavor. The purpose of this paper is to present practical information on how to streamline the process of evaluating learning assistance and reduce its threat.

Purpose of evaluation

To initiate the evaluation process, the purposes of evaluation must be determined. Before any evaluation methodologies or procedures are developed or implemented, the learning assistance administrator should answer a simple question: Why is the evaluation being done and for whom? Some general purposes are:

— To show that the program is being used so that funding will be retained or increased; done for users and administrators
— To find out where the program is strong or weak in order to make necessary improvements; done for the entire educational community
— To show that the service is worthwhile and effective; done for the entire educational community, with special emphasis on the learning assistance profession itself*

* We are the parents of a youthful profession. We must establish credibility with our colleagues in other disciplines, and, to a certain extent, we must prove to ourselves that we are credible. Often, we feel that we are providing an essential service for students because they say we are, but in institutions of high learning where research is often part of the institutional mission we are obligated to participate in that mission. Evaluation which shows that customers of our service are satisfied is one way to demonstrate effectiveness, but we need to substantiate this evidence with more empirical research.

Source: Enright, G. (Ed.). Proceedings of the Fifth Annual Conference of the Western College Reading Assoc., 1981

— To understand the needs of the population served and to provide services that meet those needs; done for the entire educational community
— To make effective decisions about the program operation, modification and continuation; done for the entire educational community

The diverse nature of programs, institutions, and people makes this seem like an endless list, but establishing the purpose is prerequisite to all evaluation.

Content of evaluation

A second component of developing an evaluation system focuses on the content and organization of the program. The evaluator must ask, "What is it I need to evaluate?" If a program has comprehensive performance objectives, i.e. objectives for every aspect of the program including evaluation systems, then deciding what to evaluate is relatively easy; one simply bases the evaluation plan on the performance objectives. However, not everyone believes that performance objectives are helpful. In fact, some individuals find them restrictive. The chart below can be used in a situation where there are no written performance objectives. This chart identifies aspects of a learning assistance program that could be evaluated. It was developed by participants of the 1979 and 1980 *WCRA Evaluation Institutes* to be utilized as a checklist or starting point for evaluators with or without written objectives. Please note that the list may not be comprehensive due to the divergent nature of programs that exist and that a program may include any combination of these items.

1.0 PROGRAM ADMINISTRATION
- 1.1 Goals of program reflective of instructional goals
- 1.2 Goals of program reflective of departmental goals
- 1.3 Overall goals and specific objectives (timing, scheduling, services) matched to needs of student population to be served
- 1.4 Cost effectiveness of program
- 1.5 Organization of program
- 1.6 Organization of staff
- 1.7 Staff selection
- 1.8 Staff supervision
- 1.9 Staff communication channels

2.0 PERSONNEL
- 2.1 Ongoing training
- 2.2 Communication skills
- 2.3 Interpersonal skills
- 2.4 Professional development
- 2.5 Interaction with faculty/staff
- 2.6 Interaction with other in-house staff
- 2.7 Impact on students
- 2.8 Delivery techniques/style
- 2.9 Time management

3.0 MATERIALS
- 3.1 Variety of materials appropriate for client's needs and program goals
- 3.2 Appropriate sequence of materials
- 3.3 Appropriate selection of materials for client's diagnosed affective and cognitive needs
- 3.4 Appropriate selection for client's preferences
- 3.5 Staff developed materials

4.0 INSTRUCTION
- 4.1 Individualized delivery method
- 4.2 Self-paced delivery method
- 4.3 Small group delivery method
- 4.4 Large group delivery method
- 4.5 Tutorial delivery method
- 4.6 Competency based delivery method
- 4.7 Norm based delivery method
- 4.8 Appropriate selection of method for clients' varied learning styles
- 4.9 Appropriateness of scheduling

5.0 CLIENTS
- 5.1 Determination of goals
- 5.2 Assessment of skill needs
- 5.3 Assessment of personal needs
- 5.4 Assessment of learning style
- 5.5 Assessment of attitude
- 5.6 Change in learning behavior
- 5.7 Change in skills
- 5.8 Change in attitude
- 5.9 Change in academic record
- 5.10 Change in expectations
- 5.11 Long range effectiveness of change
- 5.12 Accomplishment of goals
- 5.13 Utility of change
- 5.14 Transfer of changes to other courses
- 5.15 Transfer of changes to job skills
- 5.16 Transfer of changes to life skills

6.0 LEARNING ENVIRONMENT
- 6.1 Physical arrangement of facility
- 6.2 Accessability of facility/location

6.3 Accessability of facility/hours open
6.4 Pleasant and positive learning environment within facility

7.0 OUT OF HOUSE*
7.1 Needs assessment
7.2 PR/Advertising
7.3 Programs/Services
7.4 Referral
7.5 Political support

8.0 OVERALL EFFECTIVENESS OF PROGRAM
8.1 Documentation
8.2 Methods of data collection
8.3 Achievement of goals
8.4 Revision after evaluation

*Out of house refers to any service, program or activity that is conducted outside of the actual facility to achieve the goals and objectives of the total learning assistance program.

Methods of evaluation

What is to be evaluated is logically and sequentially followed by "how" to evaluate. Methodology raises its muddled head; evaluations methodologies are as numerous as learning assistance programs. Moreover, quantity is not a problem here, but quality is.[1,2,3,4,5,6,8,9,16] Making decisions about which methodologies to use and how to use them can be overwhelming, since much is written on general evaluation.[7,10,11,12,14,15] Unfortunately, little is applied to the learning assistance field, and it is necessary to review the voluminous literature of practitioners in other educational fields.

When choosing methodologies, one must keep in mind the purpose of the evaluation and for whom it is going to be completed, since some methodologies will not be respected by or are not appropriate for all audiences. For example, faculties at universities are not typically impressed by learner questionnaire results (although they often use them for the evaluation of their own teaching and for promotion purposes). Administrators appreciate knowing the numbers of clients served, but they also want to know if the service is cost-effective; therefore, complicated cost-benefit analysis studies may be required. Students are impressed with their improved skill levels and might value the results of standardized tests; however, learning center staff members may think such test results are invalid. Almost everyone in post-secondary education wants to know if students stay in school longer or succeed in particular classes as a result of participating in a learning assistance program. Grade point average analysis and pre- and post-test results are typically used for this purpose, but often are not appropriate because there are too many variables beyond the control of the learning assistance program[3,4,8,9,13] affecting these measures.

To help in choosing methodologies, Martha Maxwell's book, *Improving Student Learning Skills* contains an excellent checklist that identifies types of evaluation methodologies to use with various program components. Maxwell's checklist includes qualitative measures such as case studies and observations.[9] In learning assistance centers, where we are constantly dealing with many affective variables, it is very important for practitioners to realize the value of the qualitative methodologies developed by sociologists. Patton's book *Qualitative Evaluation Methods* provides detailed information in this area.[10]

Below are several additional suggestions for selecting and using evaluation methods:

1. Questionnaires and surveys can be informative, but they should be direct, easy to read, and not the sole methodology used. Instruments should be piloted with a small group before they are distributed to a larger population, so that ambiguous items can be identified and changed. (See Berdie[2] for more information.)
2. Qualitative measures such as observation, interviews, and case studies can be used for evaluating the behavior and attitude changes that cannot be demonstrated in controlled GPA analysis and retention studies. The use of these measures requires adequate time, staff and patience. However, an administrator could recruit upperclassmen or graduate students who need to complete research requirements to conduct these studies. (See Patton[10] for more information.)
3. The use of standardized tests to evaluate instruction has been widely criticized.[4,9,11] No space will be used here to further condemn these tests. However, more research is being conducted on the effectiveness of criterion-referenced tests, and they show much promise in an area which heretofore has been an evaluation disaster. (See Popham[11] for more information.)
4. Methodologies which attempt to foster more objective evaluations are readily available for the practitioner. Techniques such as goal free evaluation[14], responsive evaluation[15], and transactional evaluation[12], can be beneficially utilized in situations where evaluation is perceived as threatening. "Goal Free" evaluation employs a subtle interview technique to examine program achievements as well as unintended program effects. "Responsive" evaluation seeks to portray a program rather than judge it through informal observation, interview, and case study; while an important use of "transactional evaluation" is in the area of staff communication, especially when conflict is involved.
5. Data collection is a pervasive responsibility vital to the continuation and documentation of a service. However, one must guard against its becoming so important that it overshadows the actual services provided. Hence, data should be collected with a clear purpose in mind and analyzed accordingly. Procedures for collecting the data should be writ-

ten down. Staff should be well-informed of the purpose behind the data collection, trained to follow the procedures, and spot checked for efficiency. Forms for easy collection of the data should be developed and evaluated periodically to insure that they actually facilitate rather than complicate the data collection. A master form which catalogues all forms and states the purpose, date initiated, location, and evaluation comments should be developed and placed in a notebook with copies of all forms. Additionally, working with the computer science department, institutional research office (if available) and the registrar can facilitate the data collection process. (See Devirian[6] for more information.)

Implementing evaluation

After evaluation methodologies have been determined, actual forms, questionnaires, or instruments must be developed; procedures must be designed and communicated to those involved; and the time sequence for implementing the evaluations must be decided. This is perhaps the most crucial and time consuming stage of the evaluation process, and it must be carefully planned or evaluation results may be invalid, untimely, unavailable, or inaccessible. For example, it is conceivable that it could take longer than anticipated to develop a questionnaire examining student satisfaction of a program, only for it to be ready the last day before final exams. Students would probably be preoccupied with exams, and the return of the questionnaire would be abnormally low.

Evaluation procedures should always be written down for two basic reasons: (1) to reduce the possibility of error and inaccurate results, and (2) to document the evaluation systems so they too can be evaluated from time to time. Limited space does not allow for a full description of the many details that should be remembered when conducting the actual evaluation. However, the Joint Committee for Educational Evaluation has a publication, *Standards for Educational Programs, Projects, and Materials*[7] which specifies guidelines and procedures for completing evaluations.

The final stage of any evaluation, but most importantly of learning assistance evaluation, is the use of the results. Once the data has been collected, it must be analyzed and examined to help both evaluators and administrators make appropriate decisions about program operation, modification, continuation, or deletion. The results should be examined very shortly after they are available; they become outdated quickly. To maintain objectivity, it is advisable to ask colleagues outside of the program to help analyze the data. Finally, records of the decisions that were made should be kept and used for further planning.

Conclusion

Administrators tend to put off evaluation because "judging the worth" of some thing or person is often threatening. "Spur of the moment" evaluations

TABLE I
Evaluation Plan

WHAT?	HOW & WHEN DO I OBTAIN THE NEEDED INFORMATION?	FORM NEEDED?	WHAT INFORMATION DO I HAVE?	WHAT IS MY DECISION?	REPORT TO:
Tutor Performance	1. Develop a checklist of criteria for effective tutoring (July) 2. Measure tutor performance on Likert scale using videotaped simulations (August training pre-test; November training post-test). 3. Observe performance on the job (schedule 5 observations each week of fall semester).	Yes observation notes	Review checklists and notes for each tutor.	Develop specific training sessions for areas of weakness and assign tutors to sessions as needed.	Tutors
Materials	1. Tally # of times materials used from sign out sheets (weekly). 2. Develop, distribute, & tally questionnaire to tutors & clients on value of materials and needs (after mid-terms each semester). 3. Compare results of 1 & 2. 4. Ask professors in appropriate disciplines to review materials using a common form (prior to material purchase).	Yes Yes	X Materials never used and not liked by clients. X Materials never used and not liked by tutors. X Materials used frequently and not liked by clients. X Materials used frequently and liked by clients.	Reevaluate materials which are reviewed negatively; supplement, if necessary. Reorder materials used frequently. Order materials needed but not stocked at all. Develop materials needed and not available for purchase.	Tutors Clients Professors
Client Needs	1. Prepare intake card which includes demographic data & client needs (initial interview). 2. Record needs identified during all contacts with clients (ongoing). 3. Tally needs identified by clients (monthly) 4. Tally areas actually assisting student (monthly)	Yes Yes	Helping students in X areas and not in X areas.	Develop and provide additional programs of need, depending on budget. Request additional funds and staff if they can be supported by need studies.	Staff Tutors Administration

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will yield similar results. Procrastinating on evaluation can be avoided by making the process visual and writing down the specific tasks to be accomplished. Table I offers an example of a partial plan for evaluating three aspects of a learning assistance center. The "What" column of Table I contains aspects of the program to be evaluated. Objectives could be written here as well. In the "How" and "When" columns, specific tasks of the evaluation methods are listed, and the time when they should be completed is written down. A column labeled "Form Needed" is included to help the practitioner keep track of the number of forms that must be generated and used. "What Information Do I Have?" is a column for recording brief statements or directions about the results (especially if there is too much information to include from the evaluation). The decisions made as a result of the evaluation are recorded in another column, and the individuals or groups who should be informed of the results are listed in the final column.

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